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NOTICE OF ALLOWANCE AND FEE(S) DUE

61834

06/25/2008

DREIER LLP 499 PARK AVE NEW YORK, NY 10022

7590

EXAMINER

PHAM, BRENDA H

ART UNIT PAPER NUMBER

2616 DATE MAILED: 06/25/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,303	09/26/2003	Daniel J. Martin	600323-016	4449

TITLE OF INVENTION: METHOD AND SYSTEM FOR DETERMINING NETWORK CHARACTERISTICS USING ROUTING PROTOCOLS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$O	\$1740	09/25/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED</u>. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:	If the SMALL ENTITY is shown as NO:
A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.	A. Pay TOTAL FEE(S) DUE shown above, or
B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or	B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents **P.O. Box 1450** Alexandria, Virginia 22313-1450 (571)-273-2885

or <u>Fax</u>

Note: A certificate of mailing can only be used for domestic mailings of the CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 61834 7590 06/25/2008 **Certificate of Mailing or Transmission** DREIER LLP I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. 499 PARK AVE NEW YORK, NY 10022 (Depositor's name (Signature (Date APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/672.303 09/26/2003 Daniel J. Martin 600323-016 4449 TITLE OF INVENTION: METHOD AND SYSTEM FOR DETERMINING NETWORK CHARACTERISTICS USING ROUTING PROTOCOLS APPLN. TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1440 \$300 \$0 \$1740 09/25/2008 EXAMINER ART UNIT CLASS-SUBCLASS PHAM, BRENDA H 2616 370-254000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. or agents OR, alternatively, (2) the name of a single firm (having as a member a □ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) Please check the appropriate assignee category or categories (will not be printed on the patent) : 🔲 Individual 💭 Corporation or other private group entity 🛄 Government 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) 4a. The following fee(s) are submitted: LISSUE Fee A check is enclosed. Dublication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number ______ (enclose an extra copy of this fo Advance Order - # of Copies _ (enclose an extra copy of this form). 5. Change in Entity Status (from status indicated above) a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. └ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2). NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. Authorized Signature Date Typed or printed name Registration No. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

maintenance fee notifications.

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DREIER LLP 499 PARK AVE NEW YORK, NY 10022			PHAM, BRENDA H	
		ART UNIT	PAPER NUMBER	
			2616 DATE MAILED: 06/25/200	8

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1041 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1041 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)			
Notice of Allowability	10/672,303 Examiner	ARTIN, DANIEL J.			
	BRENDA PHAM	2616			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.					
1. X This communication is responsive to <u>05/05/08</u> .					
2. X The allowed claim(s) is/are <u>2-5, 7-17, now renumbered as</u>	1-15, respectively.				
 3. ☐ Acknowledgment is made of a claim for foreign priority under the second state of the second state of the second state of the state of the second state of the state of the second state of the	e been received. been received in Application No cuments have been received in this of this communication to file a reply IENT of this application. iitted. Note the attached EXAMINER	national stage application complying with the requerse of the complying with the requerse of the complexity of NC	uirements		
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.				
(a) ☐ including changes required by the Notice of Draftspers	- ,	-948) attached			
1) 🗌 hereto or 2) 🗌 to Paper No./Mail Date					
(b) ☐ including changes required by the attached Examiner' Paper No./Mail Date					
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t			oack) of		
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.					
 Attachment(s) 1.	5. ☐ Notice of Informal F 6. ☐ Interview Summary Paper No./Mail Da 7. ⊠ Examiner's Amendr 8. ⊠ Examiner's Stateme 9. ☐ Other /Brenda Pham/ Primary Examiner, Art Unit	(PTO-413), te ment/Comment ent of Reasons for Allow	vance		

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Timothy J. Bechen, Reg. No. 48,126 on June 16, 2008.

2. The application has been amended as follows:

Claim 2 is deleted in entirely and is replaced it with the following:

"A method for determining a topology of a network, the method comprising:

communicating with a first router in the network;

querying a first link state database of the first router for first Type 1 and Type 2 link state advertisements in a first area;

importing the Type 1 and Type 2 link state advertisement into a network topology information database; and

sweeping all networks in the first area announced by the first router and which make Type 3, Type 4, Type 5 or Type 7 announcements."

Claim 6 has been canceled.

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Claim 7, line 1, "The method as recited in claim 6" has been amended to "The method as recited in claim 2".

REASONS FOR ALLOWANCE

3. Claims 2-5, 7-17 allowed over prior arts made of record.

4. The following is an examiner's statement of reasons for allowance: The prior art made of record does not teach or fairly suggests in combination steps of querying a first link state database of the first router for first Type 1 and Type 2 link state advertisements in a first area; importing the Type 1 and Type 2 link state advertisement into a network topology information database; and sweeping all networks in the first area announced by the first router and which make Type 3, Type 4, Type 5 or Type 7 announcements.

The prior art further fails to teach in combination querying the first router for a first area identifier; determining whether the first router is an autonomous system boundary router based on the first area identifier; and when the first router is an autonomous system boundary router, querying the first router for networks directly connected to the first router and ignoring all other Type 5 announcements in the first link state database.

The prior art made of record fails to teach in combination steps of importing the first Type 1 and Type 2 link state advertisements into a first network topology information database; query the first router for a first area identifier; determining whether the first router is an area border router based on the first area identifier; when the first router is an area border router, querying the first router for other areas bordered by the

first router; and importing topologies of the networks in the other areas into the network topology information database.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

Luciani (US 6,418,476 B1) discloses method for synchronizing network address translator (NAT) tables using the open shortest path first OPAQUE links state advertisement option protocol.

Crawley et al (US 5,995,503) discloses method and apparatus for providing quality of service routing in a network.

Zinin et al (US 6,820,134 B1) disclose optimizing flooding of information in linkstate routing protocol.

Kalmanek, Jr. et al (US 6,711,152 B1) disclose routing over large clouds.

Weinstein et al (US 6,977,937 B1) disclose Link state information of the network that has been forwarded to the router is received and used to determine the connection in the network.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Pham whose telephone number is (571) 272-3135. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild, can be reached on (571) 272-2092.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

June 16, 2008

/Brenda Pham/

Primary Examiner, Art Unit 2616